FIG. 1

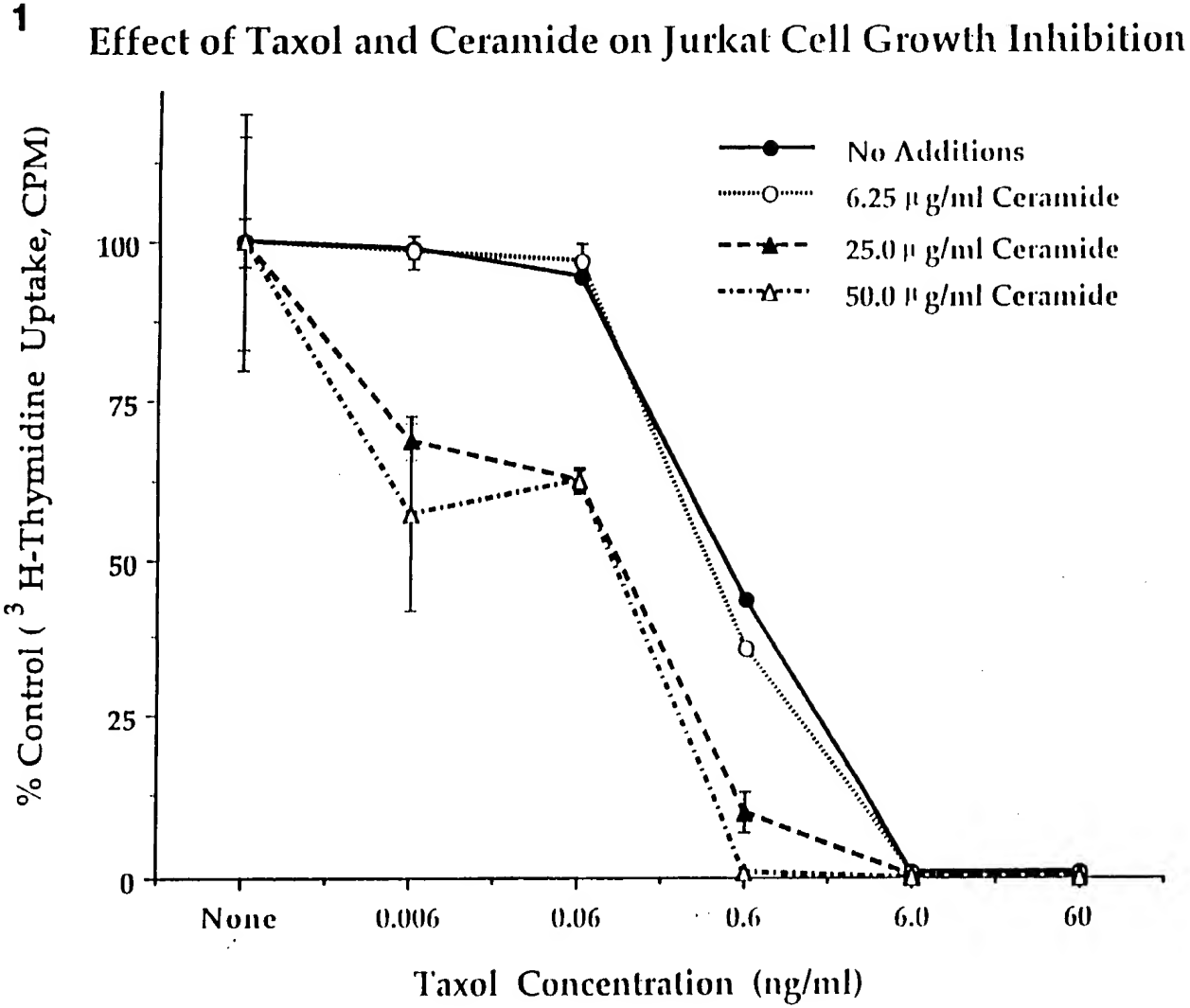


FIG. 2

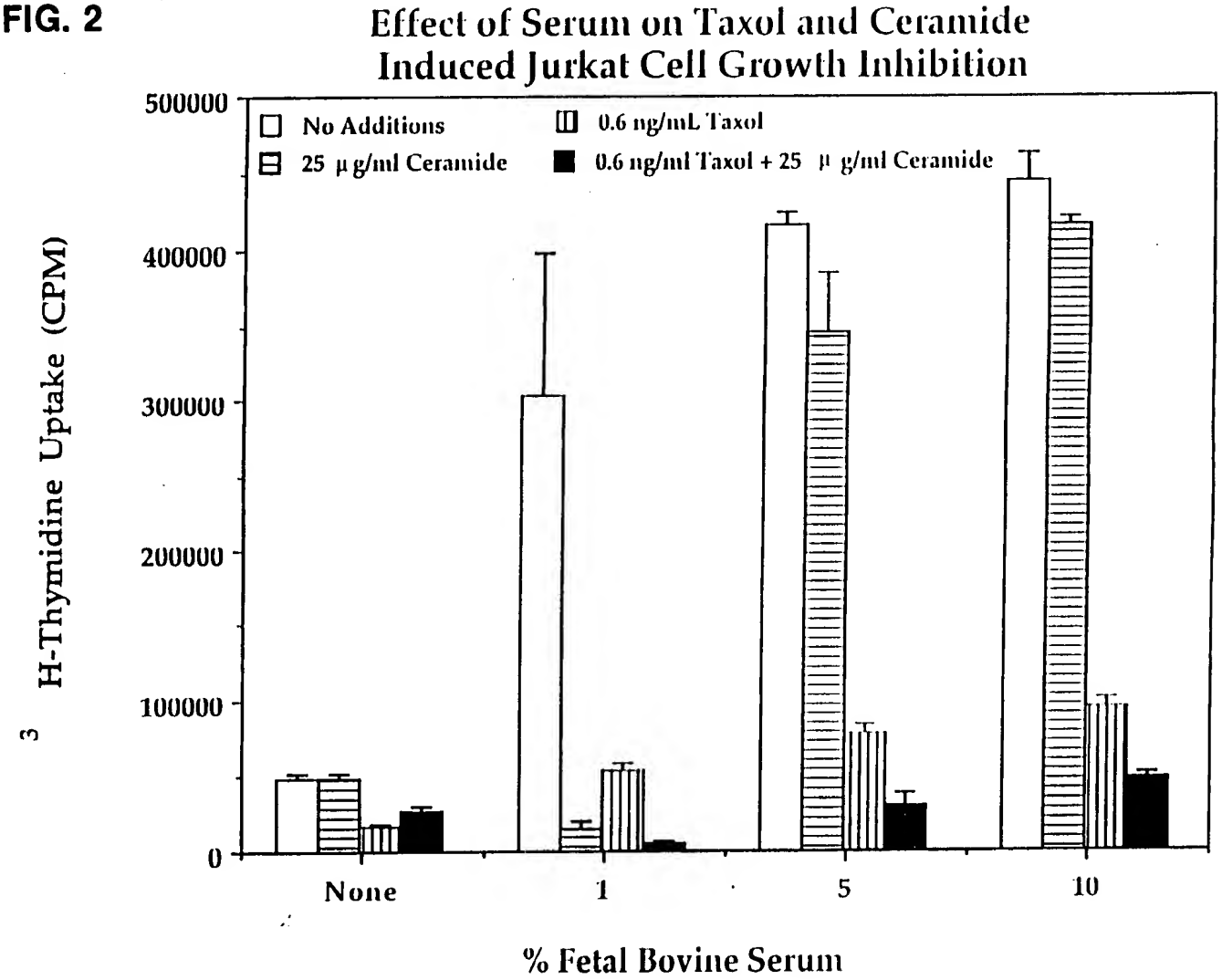
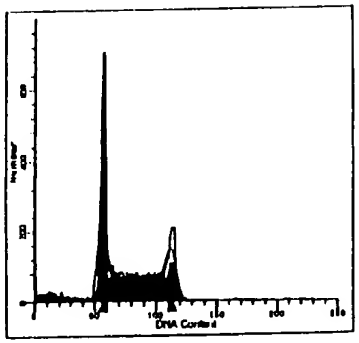


FIG. 3A

A



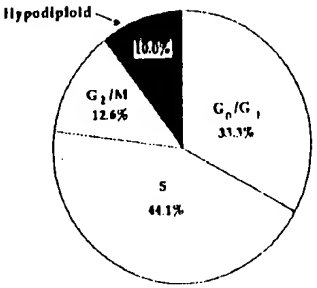
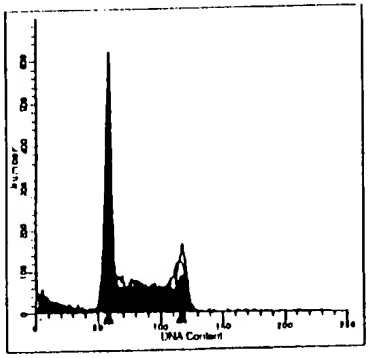


FIG. 3B

B



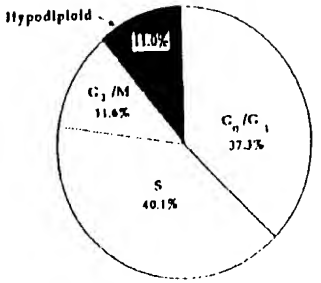
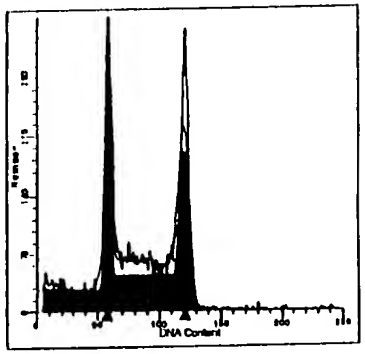


FIG. 3C

C



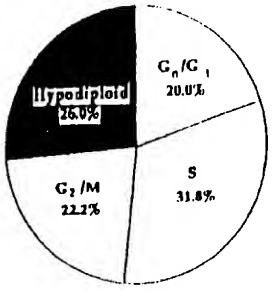
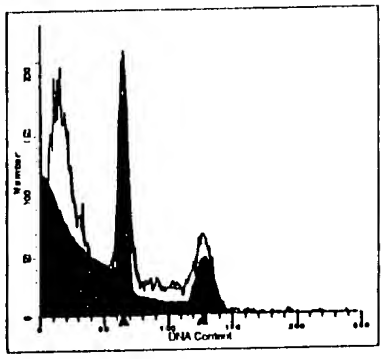


FIG. 3D

D



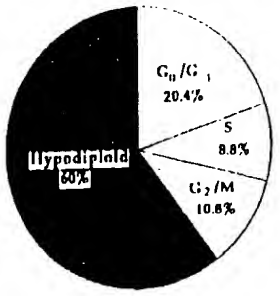


FIG. 3E

E

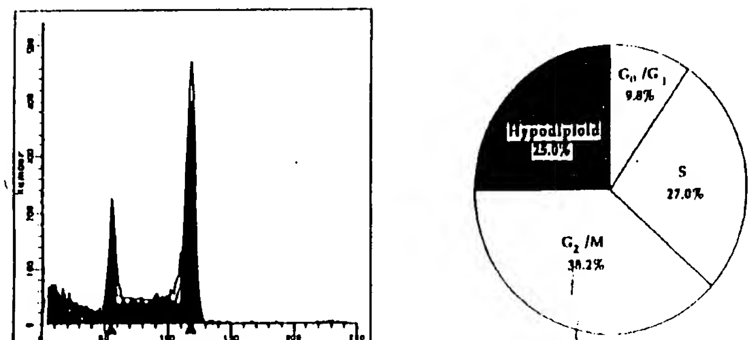


FIG. 3F

F

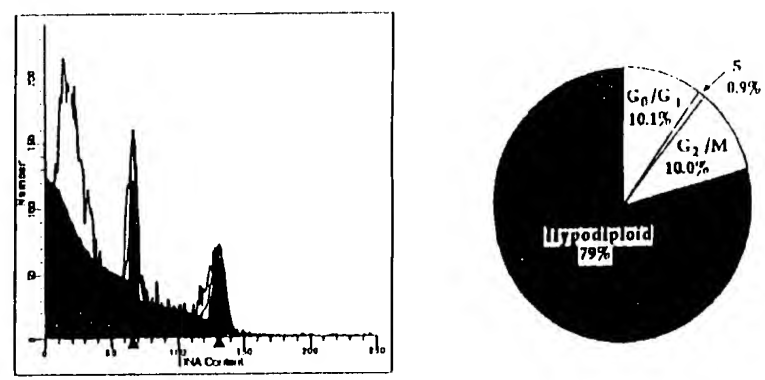
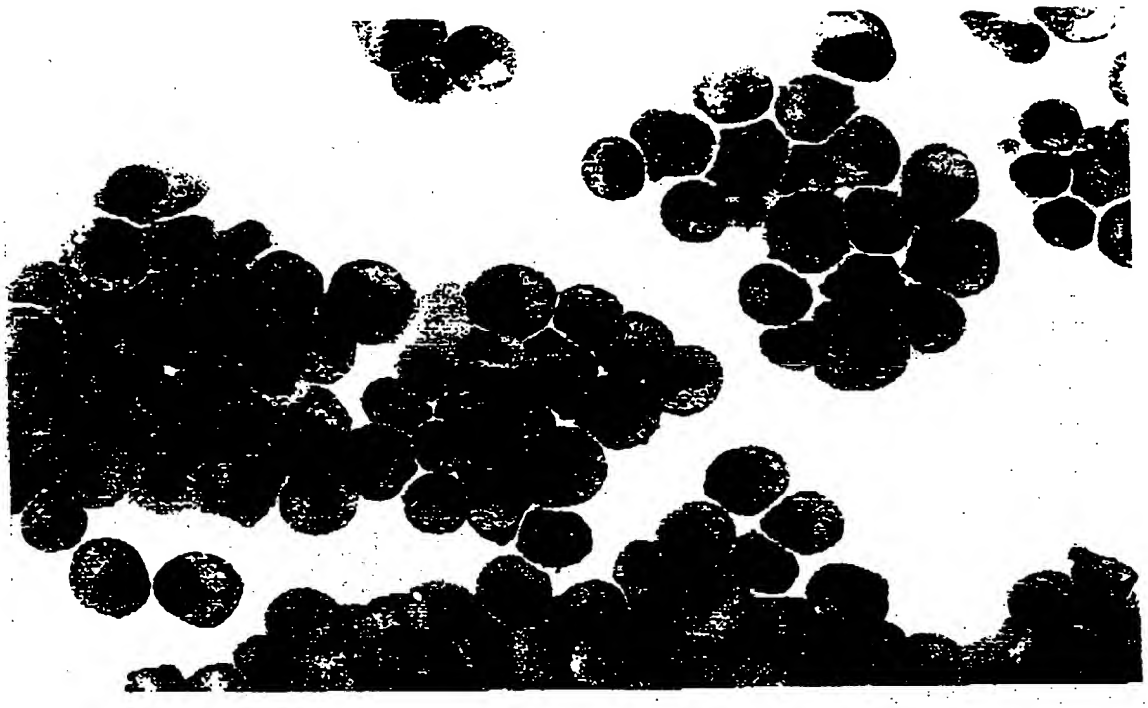


FIG. 4A

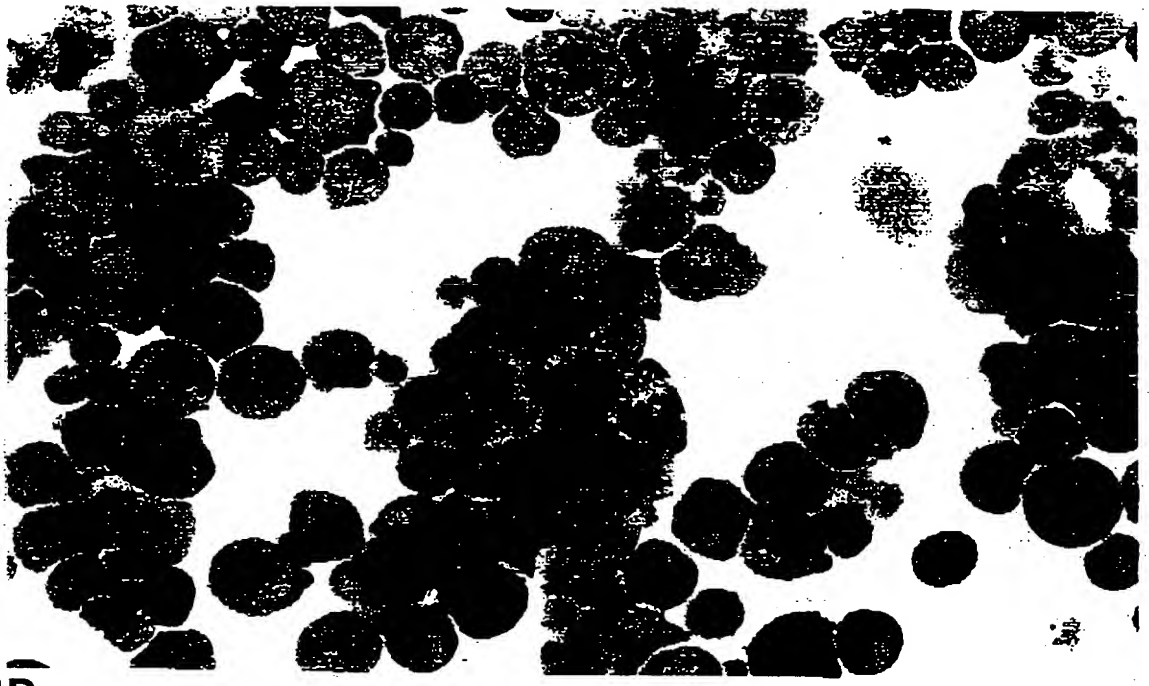


Untreated

FIG. 4B

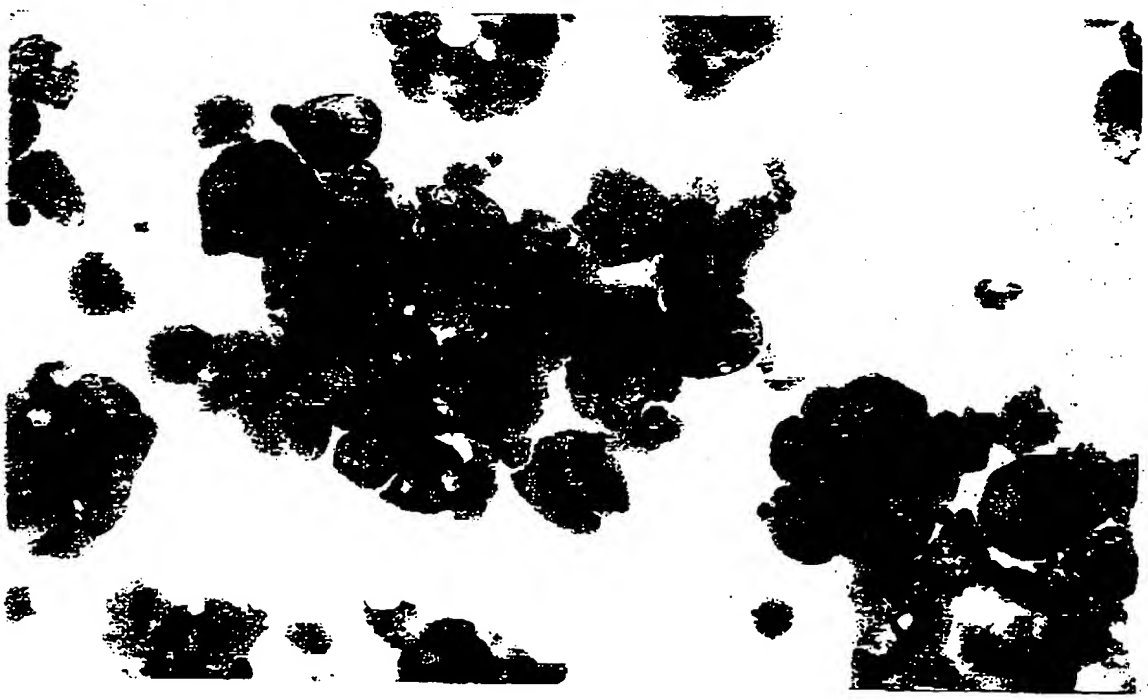
+25 μg/ml Ceramide

FIG. 4C



+0.6 ng/ml Paclitaxel

FIG. 4D



+6.0 ng/ml Paclitaxel

FIG. 4E

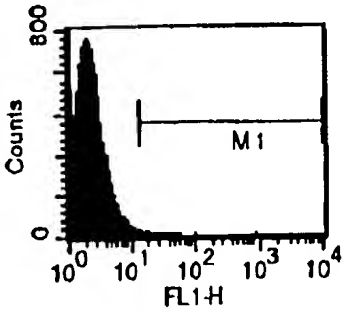

0.6 ng/ml Paclitaxel
+
25 μg/ml Ceramide

FIG. 4F


6.0 ng/ml Paclitaxel
+
25 μg/ml Ceramide

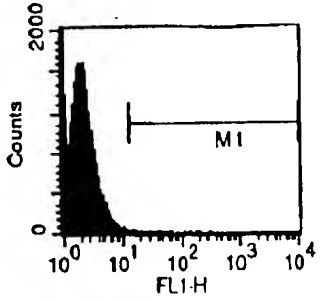
Taxol and Ceramide Induction of Apoptosis in Jurkat Cells

FIG. 5A (24 Hours)



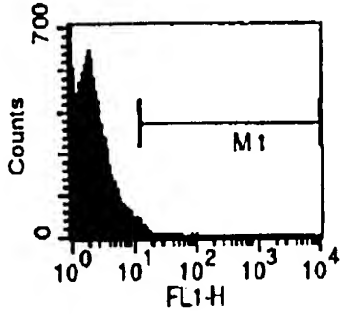
0.93%

FIG. 5B



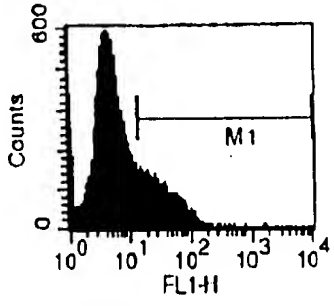
0.64%

FIG. 5C



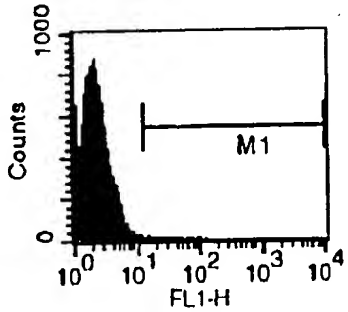
1.16%

FIG. 5D



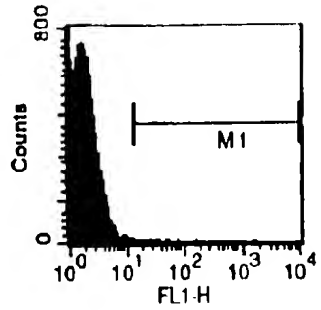
25.49%

FIG. 5E (48 Hours)



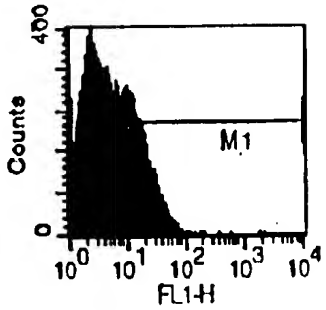
0.77%

FIG. 5F



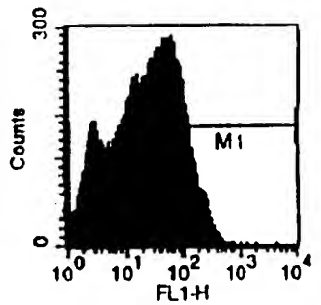
0.33%

FIG. 5G



19.60%

FIG. 5H



66.05%

FIG. 6A

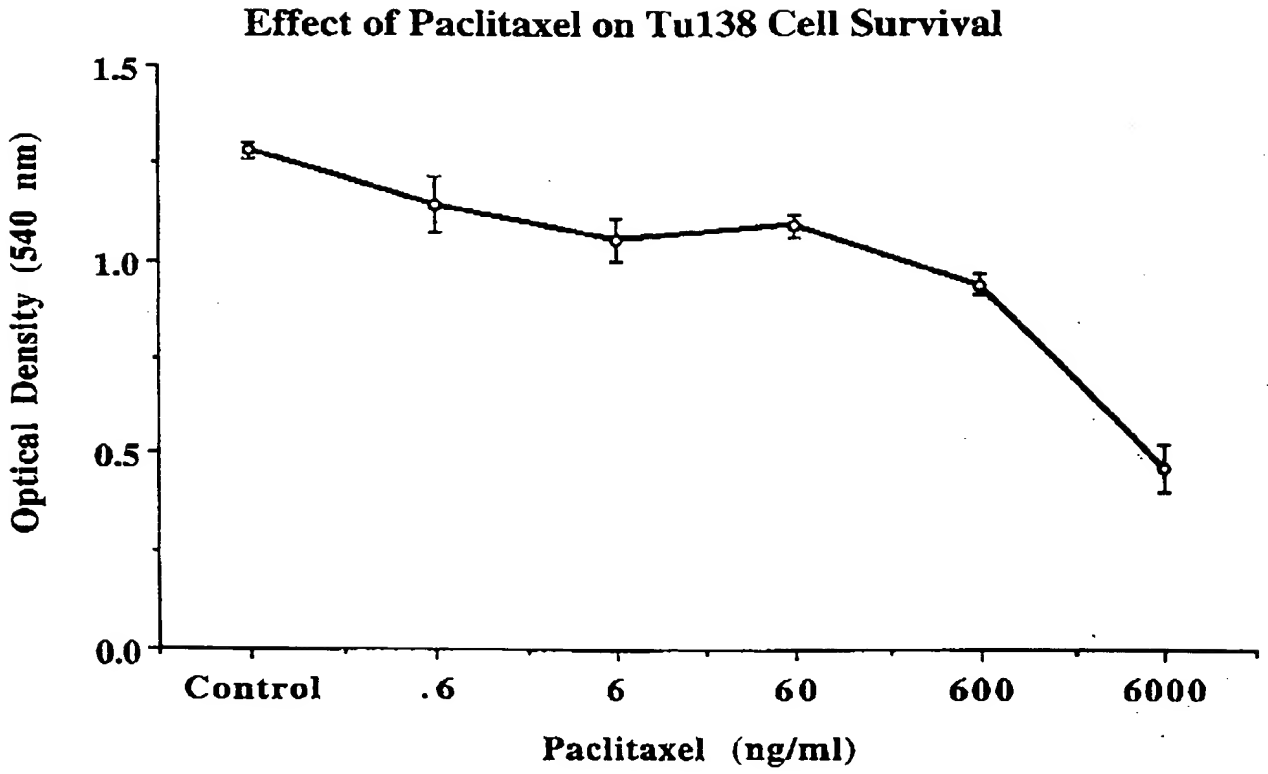

Effect of Paclitaxel on Tu138 Cell Survival
Optical Density (540 nm)
1.5
1.0
0.5
0.0
Control
.6
6
60
600
6000
Paclitaxel (ng/ml)

FIG. 6B

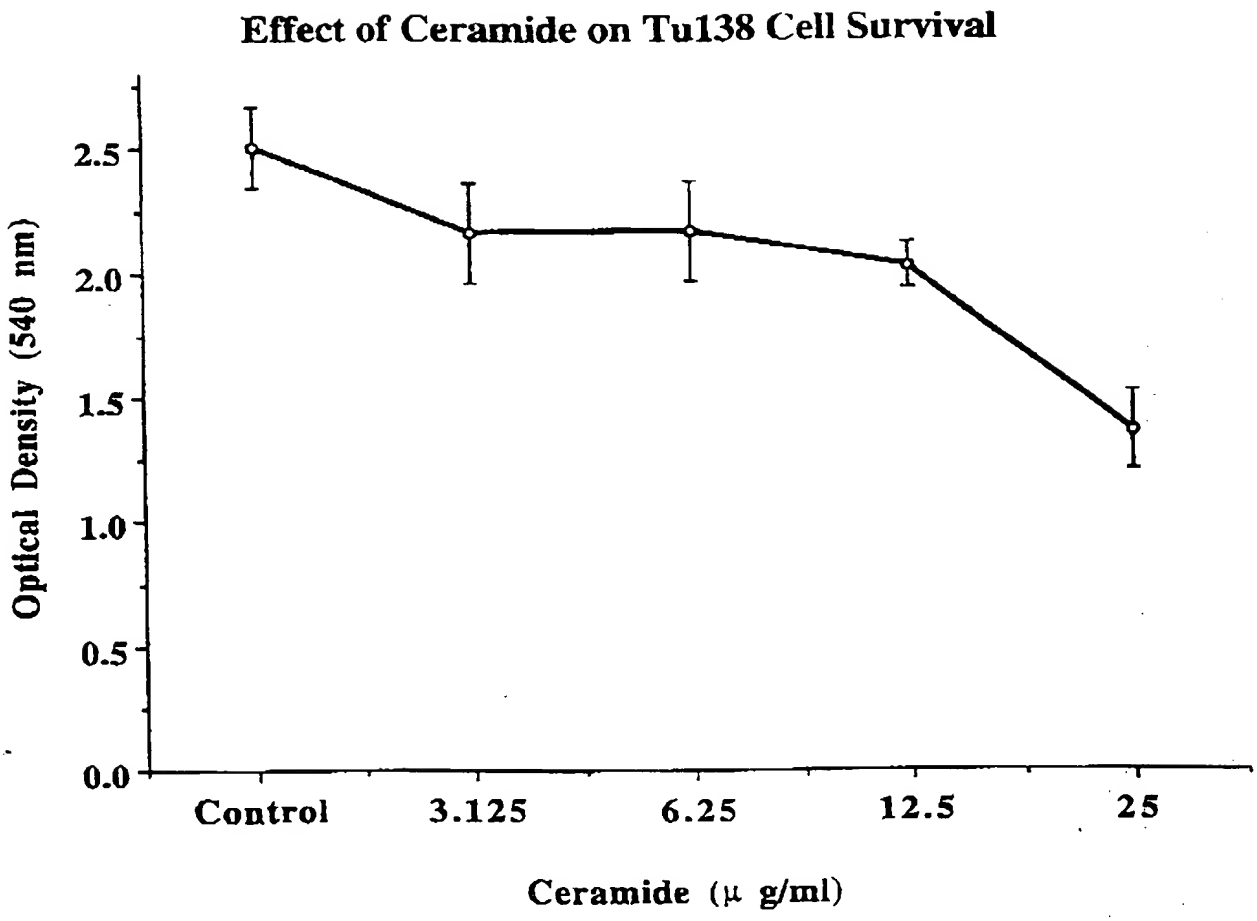

Effect of Ceramide on Tu138 Cell Survival
Optical Density (540 nm)
2.5
2.0
1.5
1.0
0.5
0.0
Control
3.125
6.25
12.5
25
Ceramide (μ g/ml)

FIG. 7

Time Kinetics of Combined Additions of Paclitaxel and Ceramide

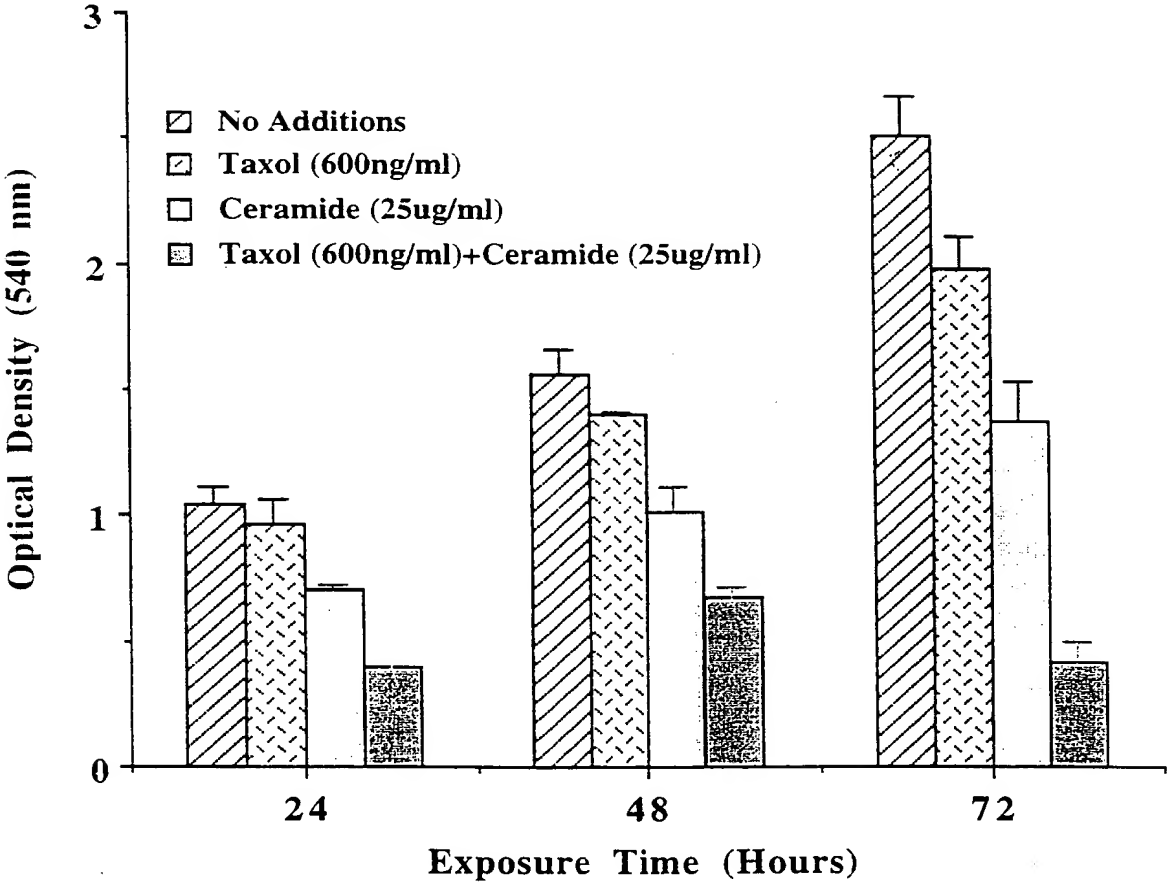


FIG. 8

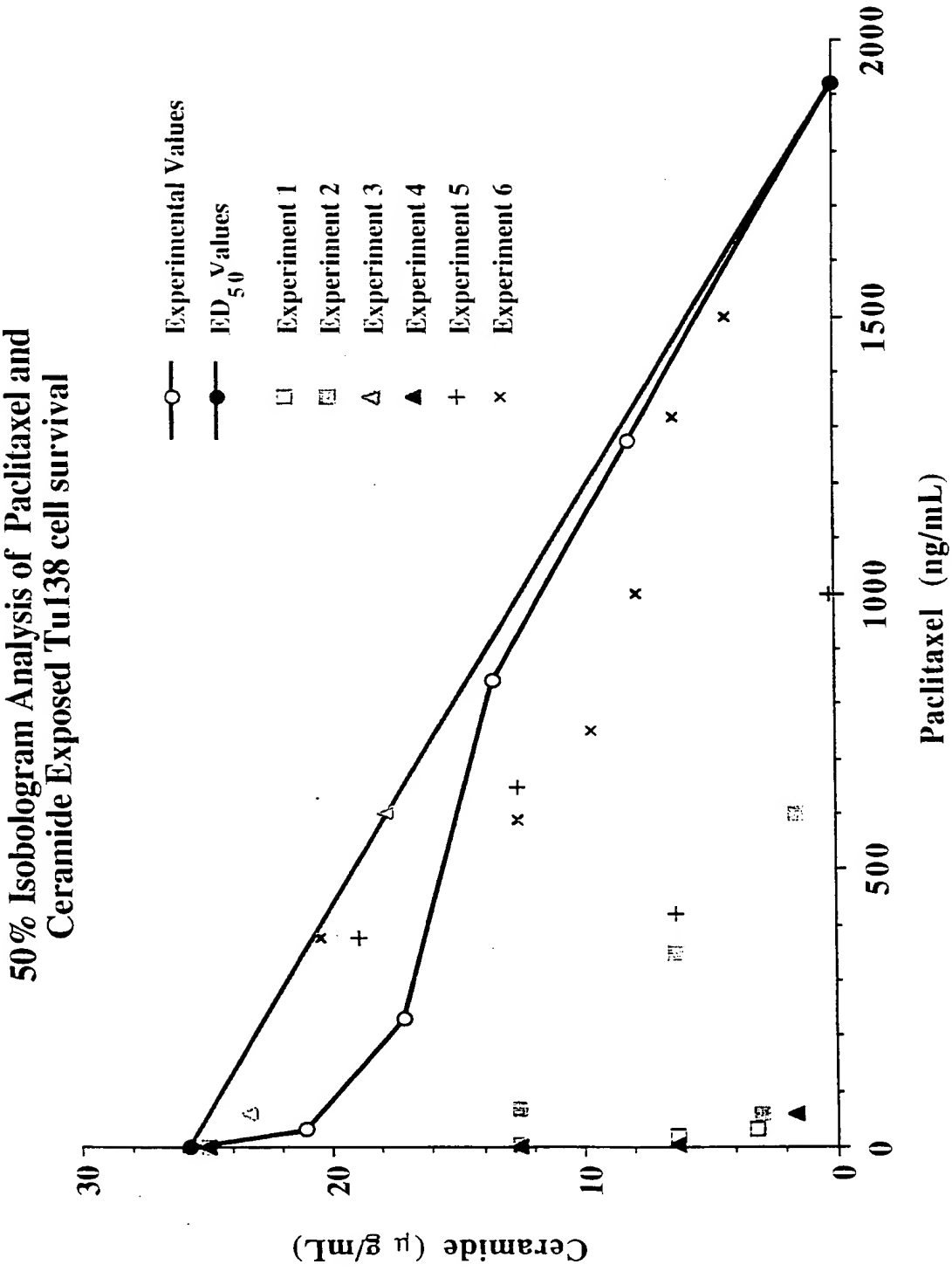
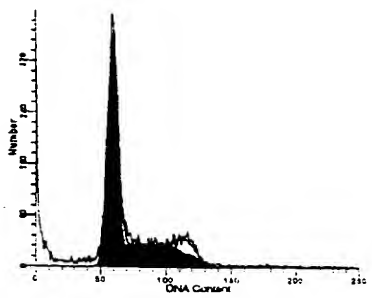

50% Isobologram Analysis of Paclitaxel and Ceramide Exposed Tu138 cell survival
Experimental Values
ED_{50} Values
Experiment 1
Experiment 2
Experiment 3
Experiment 4
Experiment 5
Experiment 6
Ceramide (μ g/mL)
Paclitaxel (ng/mL)
0
10
20
30
500
1000
1500
2000

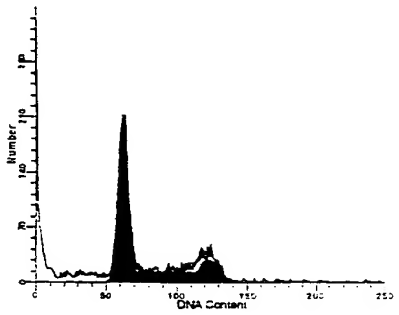
FIG. 9A



G_0-G_1: 59.1%
S: 33.5%
G_2-M: 7.4%

Control - No Additions (24 hours)

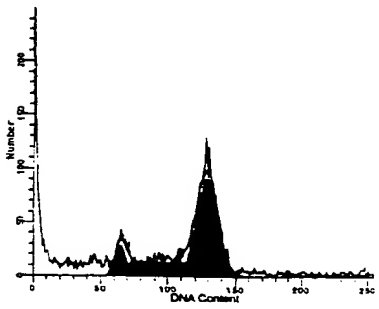
FIG. 9B



G_0-G_1: 56.7%
S: 26.8%
G_2-M: 16.5%

Ceramide 25 µg/ml (24 hours)

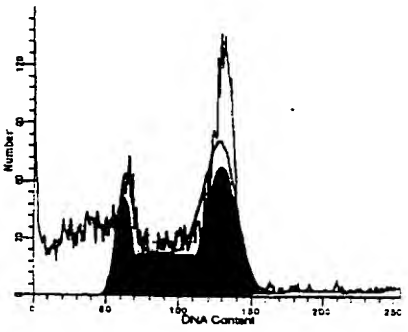
FIG. 9C



G_0-G_1: 9.5%
S: 28.7%
G_2-M: 61.8%

Paclitaxel 600 ng/ml (24 hours)

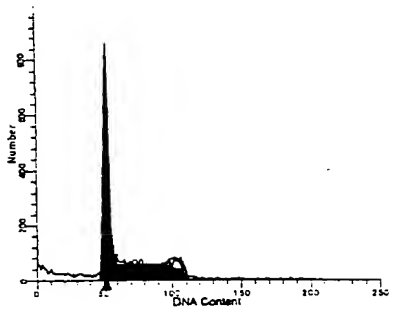
FIG. 9D



G_0-G_1: 17.2%
S: 37.2%
G_2-M: 45.6%

Ceramide 25 µg/ml (24 hours)
+ Paclitaxel 600 ng/ml

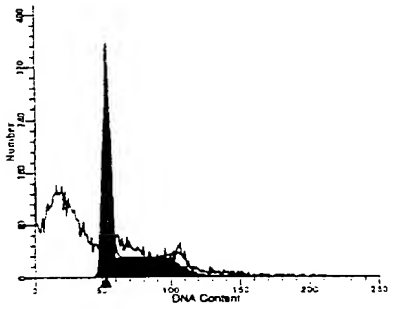
FIG. 9E



G_0-G_1: 53.9%
S: 40.2%
G_2-M: 6.0%

Control - No additions (48 hours)

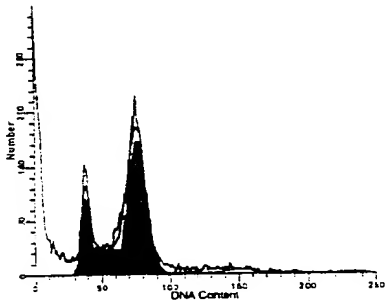
FIG. 9F



G_0-G_1: 54.9%
S: 39.6%
G_2-M: 5.5%

Ceramide 25 µg/ml (48 hours)

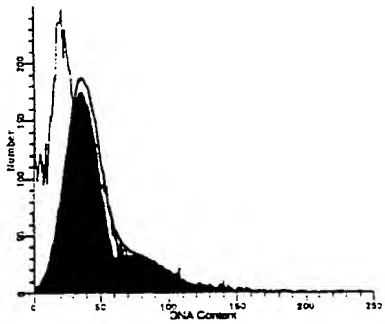
FIG. 9G



G_0-G_1: 16.7%
S: 25.2%
G_2-M: 58.2%

Paclitaxel 600 ng/ml (48 hours)

FIG. 9H



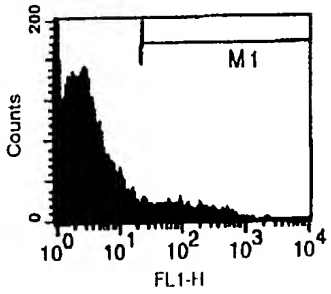
G_0-G_1: 71.6%
S: <1%
G_2-M: 28.4%

Ceramide 25 µg/ml (48 hours)
+ Paclitaxel 600 ng/ml

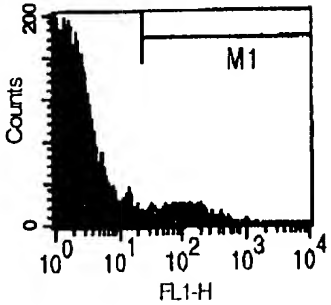
Time Kinetics Of The Induction Of Apoptosis By Paclitaxel And Ceramide Acting In Combination.

FIG. 10A **FIG. 10B** **FIG. 10C** **FIG. 10D**

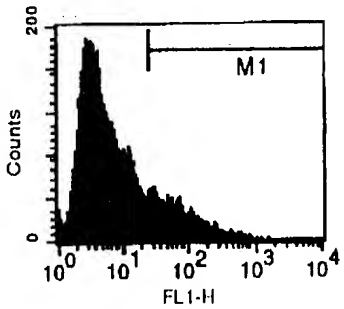
24 Hours Of Taxol And/Or Ceramide Exposure.



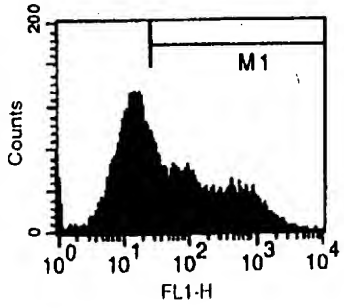
Control - no additions
Apoptosis: 8.7%



Ceramide (25 µg/ml)
Apoptosis: 9.7%



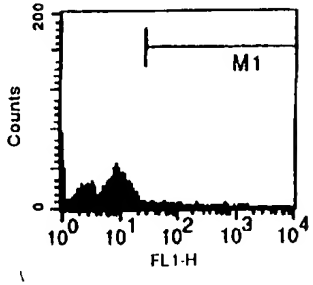
Paclitaxel (600 ng/ml)
Apoptosis: 18.35%



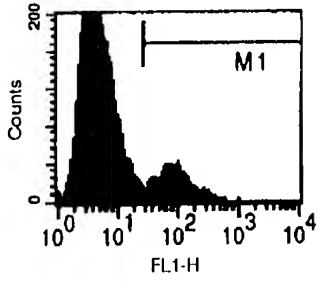
Ceramide 25 µg/ml
+ Paclitaxel 600 ng/ml
Apoptosis: 53.7%

FIG. 10E **FIG. 10F** **FIG. 10G** **FIG. 10H**

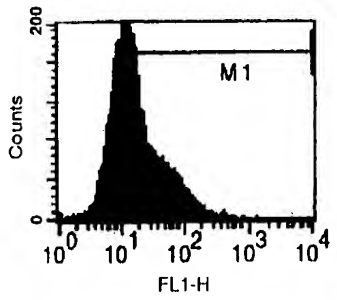
48 Hours Of Taxol And/Or Ceramide Exposure.



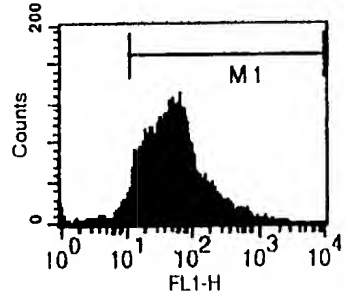
Control - no additions
Apoptosis: 7.8%



Ceramide (25 µg/ml)
Apoptosis: 13.6%



Paclitaxel (600 ng/ml)
Apoptosis: 54.7%



Ceramide (25 µg/ml)
+ Paclitaxel 600 ng/ml
Apoptosis: 84.9%

FIG. 11 Growth of Human Squamous Carcinoma Cells in Nude Mice

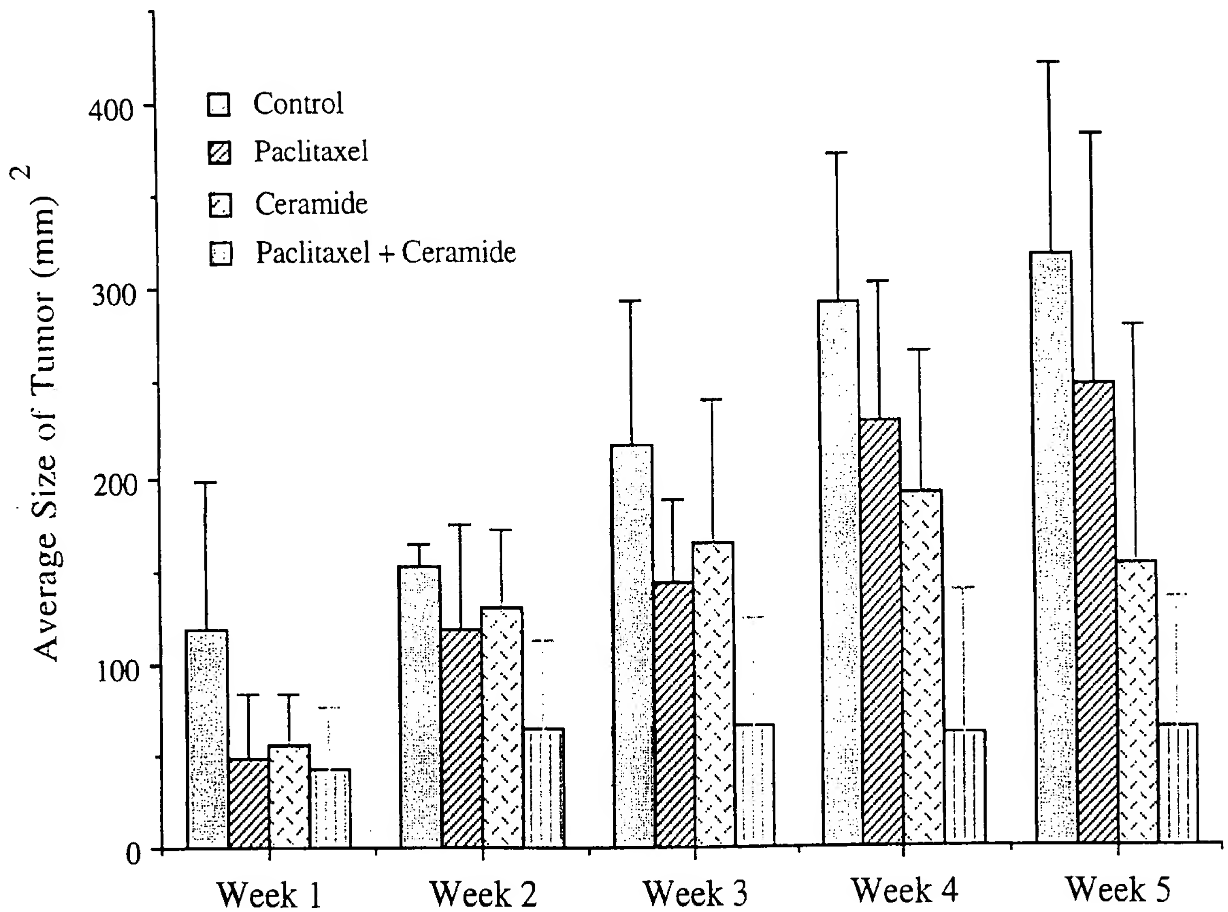


FIG. 12 Excised Tumor Weights